

Customer No.: 31561
Docket No.: 10465-US-PA
Application No.: 10/707,354

Clean Version

SLEW RATE ENHANCEMENT CIRCUIT VIA DYNAMIC OUTPUT STAGE

CROSS-REFERENCE TO RELATED APPLICATION

This application claims the priority benefit of Taiwan application serial no.

Sub Spec 92105571, filed March 14, 2003.

BACKGROUND OF THE INVENTION

Field of Invention

[0001] The present invention relates to a slew rate enhancement circuit. More particularly, the present invention relates to the slew rate enhancement circuit which is compact and occupies small chip area.

Description of Related Art

[0002] To achieve a high slew rate, when an operational amplifier ("OPAMP") drives a heavy load. Many techniques are used to enhance the slew rate, such as: increasing operating current of OPAMP, reducing a compensation capacitor, or being connected to an error amplifier. Except for the high slew rate, a lot of disadvantages such as a high operating current and a stability degradation for original OPAMP, a large chip area, complexity of circuit design, noise and offset are introduced from the followed error amplifiers.

[0003] FIG. 1 illustrates a high slew rate amplifier according to a prior art. The circuit in FIG. 1 includes an OPAMP 102, error amplifiers 104, 106 and a push-pull output stage 112. The push-pull output stage includes a P-type Metal Oxide